#### COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area: Little Neck Bay
Designated: September 15, 1992
County(ies): Queens; Nassau

Town(s): New York City (Queens); North Hempstead

7½' Quadrangle(s): **Flushing, NY** 

### **Score** Criterion

## **16** Ecosystem Rarity (ER)

One of several major bays on the north shore of Long Island; rare in ecological subregion.

# **0** Species Vulnerability (SV)

No endangered, threatened or special concern species are known to reside in the area.

### 20.5 Human Use (HU)

Recreational fishing pressure is of statewide significance; commercial clam harvest for transplanting is of regional significance. Additive division: 16 + 9/2 = 20.5.

# 13.5 Population Level (PL)

One of about five major waterfowl wintering areas on the north shore of Long Island, of regional significance. Also, one of the most significant striped bass nursery areas in the region. Additive Division: 9 + 9/2 = 13.5.

### **1.2** Replaceability (R)

Irreplaceable.

#### DESIGNATED HABITAT: LITTLE NECK BAY

### **HABITAT DESCRIPTION:**

Little Neck Bay is the westernmost bay on the north shore of Long Island, located between Fort Totten Military Reservation and Great Neck. This approximate 1400 acre area is located in the Borough of Queens, Queens County, and in the Town of North Hempstead, Nassau County (7.5' Quadrangle: Flushing, N.Y.). The fish and wildlife habitat consists of open water area in the bay, extending out to Willets Point on the west side, and to the Village of Kings Point on the east. Most of Little Neck Bay is less than 8 feet deep at mean low water, and has a tidal fluctuation of approximately 7 feet. The outer limit of the area is at the approximate 18-foot depth contour (below mean low water). The bay is bordered by dense residential development, Fort Totten, the Cross Island Parkway, and extensive recreational boating facilities.

### FISH AND WILDLIFE VALUES:

Little Neck Bay is one of several major embayments on Long Island's north shore. This relatively shallow coastal bay is important to fish and wildlife throughout the year. Little Neck Bay is one of about 5 major waterfowl wintering areas (November - March) on the north shore. Mid-winter aerial surveys of waterfowl abundance for the ten year period 1978-1987 indicate average concentrations of over 1,200 birds in the bay each year (2,564 in peak year), including approximately 900 scaup (2,250 in peak year), 160 canvasbacks (875 in peak year), and 140 American black ducks (345 in peak year), along with lesser numbers of mallard, Canada goose, common goldeneye, and red-breasted merganser. Waterfowl use of the bay during winter is influenced in part by the extent of ice cover each year. Concentrations of waterfowl also occur in Little Neck Bay during spring and fall migrations (March - April and October - November, respectively).

In addition to waterfowl use, Little Neck Bay is a productive area for marine finfish and shellfish. The bay serves as an important nursery and feeding area for striped bass. Other fish species found here at various times of the year for nursery and feeding use (April - November, generally) include scup, bluefish, Atlantic silversides, menhaden, winter flounder, and blackfish. As a result of the abundant fisheries resources in the bay, and its proximity to the metropolitan New York area, Little Neck Bay receives very heavy recreational fishing pressure, of statewide significance. Little Neck Bay is also valuable as a hard clam producing area. Although the bay waters are not certified for commercial shellfishing, significant numbers of young clams are removed for transplanting into approved waters.

### **IMPACT ASSESSMENT:**

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test (see page 2 in this report) to a proposed activity.

Any activity that would substantially degrade water quality in Little Neck Bay would affect the biological productivity of this area. Many species of fish and wildlife are adversely affected by water pollution, such as chemical contamination (including food chain effects), oil spills,

excessive turbidity or sedimentation, and waste disposal. Efforts should be made to improve water quality in the bay, which is primarily dependent upon controlling discharges from combined sewer overflows, municipal point sources, and parkway runoff. Excavation of new navigation channels should be minimized, and maintenance dredging activities should be scheduled in late fall or winter to minimize potential impacts on most aquatic organisms. Dredge spoils should be deposited in upland containment areas. Thermal discharges, depending on time of year, may have variable effects on use of the area by marine species and wintering waterfowl: beneficial effects may result during winter months, while effects would generally be adverse during summer months. Installation and operation of water intakes would have a significant impact on juvenile (and adult, in some cases) fish concentrations, through impingement or entrainment. Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development (i.e., natural beach or salt marsh) may result in the loss of productive areas which support the fish and wildlife resources of Little Neck Bay.

#### **KNOWLEDGEABLE CONTACTS:**

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